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09/483,521	01/14/2000	Hideyuki Masuyama	00021/Lh	8500

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EXAMINER

HANNETT, JAMES M

ART UNIT	PAPER NUMBER
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2612

14

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/483,521

Applicant(s)

MASUYAMA ET AL.

Examiner

James M Hannett

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 10-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 10, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 11-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 3/26/2004 have been fully considered but they are not persuasive. As for the arguments pertaining to Claim 2, The applicant argues that both Ravkin and Shinsky does not teach the claimed invention. Specifically the applicant argues that neither Ravkin nor Shinsky teaches the use of performing a color balance method. It was noted by the examiner in the prior office action that Ravkin in view of Shinsky did not teach this feature. However, the examiner relied on an Official notice to address this limitation.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

As for the arguments pertaining to Claim 10, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., it would not be possible to correct only valid luminance or chromaticity data without subjecting the background areas to correction, as according to the claimed present invention.) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The examiner points out that in the prior office action Claims 2, 3, and 10 were rejected under 35 U.S.C 103(a) Ravkin in view of Shinsky. However upon further review by the new examiner assigned to the case, the grounds of rejection relied upon should have been 35 U.S.C

Art Unit: 2612

103(a) Ravkin in view of official notice. Because the substance of the rejection is the same and the 103(a) rejection of Ravkin in view of Shinsky was a typographical error. The applicant should note that the limitations attributed to Shinsky in the rejection of Claim 1 are actually not recited in Claim 1, but are recited in Claim 4. Therefore, this action is made Final.

The applicant should note that examiner Matthew L. Rosendale is no longer the examiner assigned to this case. This action and all further actions will be handled by examiner James M. Hannett.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1:** Claims 2-3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,169,816 Ravkin.

**2:** As for Claim 2, Ravkin discloses an image sensing apparatus for a microscope in Figure 1 comprising an image sensing unit (32) for sensing an observation image, a computer (35) comprising a display (72) as depicted in Figure (2) for viewing the observation unit for detecting a microscopy technique between bright field and fluorescent image capture modes. Figure (4a) shows the chromaticity determining method taught by Ravkin where chromaticity is determined on the basis of the detected microscopy technique to determine a region of interest to perform image processing by finding the difference between the maximum intensity value and the background intensity value to all pixels; Column 8, Lines 8-62.

Art Unit: 2612

However, a color balance adjustment unit is not disclosed as a specific image processing means. Official notice is taken that performing a color balance adjustment on a captured image is a well known method of signal processing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a color balance adjustment means at the image processing means of Ravkin to produce a high quality image.

3: In regards to Claim 3, Ravkin also provides a luminance distribution determination unit for calculating a luminance distribution shown in Figure (4B) of the observation image on the basis of the microscopy technique to distinguish areas of interest from background areas. For example, if the image is a fluorescent image, the background is set equal to the value of the darkest pixel in the image. Ravkin discloses that further processing is only performed on the detected areas of interest shown in step 170 of Figure (5); Column 8, Lines 8-62 and (Column 9, Lines 38-Column 11, Line 15). However, a tone adjustment unit is not disclosed as a specific image processing means.

Official notice is taken that performing a tone adjustment on a captured image is a well known method of signal processing in order to improve image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a tone adjusting means as the image processing means of Ravkin to produce a high quality image.

4: In regards to Claim 10, Ravkin discloses an image sensing apparatus for a microscope in Figure 1 comprising an image sensing unit (32) for sensing an observation image and a microscopy technique determination unit for detecting a microscopy technique between bright

Art Unit: 2612

field and fluorescent image capture modes. Ravkin also provides a luminance distribution determination unit for calculating a luminance distribution shown in Figure (4B) of the observation image on the basis of the microscopy technique to distinguish areas of interest from background areas. For example, if the image is a fluorescent image, the background is set equal to the value of the darkest pixel in the image. Ravkin discloses that further processing is only performed on the detected areas of interest shown in step 170 of Figure (5); Column 8, Lines 8-62 and Column 9, Line 38-Column 11, Line 15). However, the tone adjustment unit is not disclosed as a specific image processing means.

Official notice is taken that performing a tone adjustment on a captured image is a well known method of signal processing to improve image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a tone adjusting means as the image processing means of Ravkin to produce a high quality image.

**5:** Claims 4, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,169,816 Ravkin in view of USPN 6,285,389 Shinsky et al.

**6:** As for Claim 4, Ravkin discloses a display unit (75) in Figure (2) for displaying the observation image obtained by the sensing unit (32). Ravkin does not disclose a position designating unit, white balance control unit, and a white balance correction unit.

Shinsky et al discloses a camera system having a display unit for displaying an observation image, a white balance correcting unit for correcting white balance in the observation image, a position designation unit in the form of a cursor for designating a desired position the user determines to be white in the observation image on the display, and a control

Art Unit: 2612

unit for detecting and controlling white balance on the basis of the position designated by the user in the observation image; Column 9, Lines 40-56. Shinsky et al teaches that this method is advantageous because it allows a user to properly designate white areas in the image to ensure correct white balance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the white balance system of Shinsky with the image capture system of Ravkin so that the user can properly designate white areas in the image to ensure correct white balance.

7: As for Claim 15, Ravkin discloses a display unit (75) in Figure (2) for displaying the observation image obtained by the sensing unit (32). Ravkin does not disclose a position designating unit, white balance control unit, and a white balance correction unit.

Shinsky et al discloses a camera system having a display unit for displaying an observation image, a white balance correcting unit for correcting white balance in the observation image, a position designation unit in the form of a cursor for designating a desired position the user determines to be white in the observation image on the display, and a control unit for detecting and controlling white balance on the basis of the position designated by the user in the observation image; Column 9, Lines 40-56. Shinsky et al teaches that this method is advantageous because it allows a user to properly designate white areas in the image to ensure correct white balance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the white balance system of Shinsky with the image capture

Art Unit: 2612

system of Ravkin so that the user can properly designate white areas in the image to ensure correct white balance.

8: In regards to Claim 16, Ravkin discloses an image sensing apparatus for a microscope in Figure 1 comprising an image sensing unit (32) for sensing an observation image, a computer (35) comprising a display (72) as depicted in Figure (2) for viewing the observation unit for detecting a microscopy technique between bright field and fluorescent image capture modes. Figure (4a) shows the chromaticity determining method taught by Ravkin where chromaticity is determined on the basis of the detected microscopy technique to determine a region of interest to perform image processing by finding the difference between the maximum intensity value and the background intensity value to all pixels; Column 8, Lines 8-62.

However, a color balance adjustment unit is not disclosed as a specific image processing means. Official notice is taken that performing a color balance adjustment on a captured image is a well known method of signal processing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a color balance adjustment means at the image processing means of Ravkin to produce a high quality image.

Ravkin also provides a luminance distribution determination unit for calculating a luminance distribution shown in Figure (4B) of the observation image on the basis of the microscopy technique to distinguish areas of interest from background areas. For example, if the image is a fluorescent image, the background is set equal to the value of the darkest pixel in the image. Ravkin discloses that further processing is only performed on the detected areas of interest shown in step 170 of Figure (5); Column 8, Lines 8-62 and (Column 9, Lines 38-



Art Unit: 2612

Column 11, Line 15). However, a tone adjustment unit is not disclosed as a specific image processing means.

Official notice is taken that performing a tone adjustment on a captured image is a well known method of signal processing in order to improve image quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a tone adjusting means as the image processing means of Ravkin to produce a high quality image.

Ravkin further discloses a display unit (75) in Figure (2) for displaying the observation image obtained by the sensing unit (32). Ravkin does not disclose a position designating unit, white balance control unit, and a white balance correction unit.

Shinsky et al discloses a camera system having a display unit for displaying an observation image, a white balance correcting unit for correcting white balance in the observation image, a position designation unit in the form of a cursor for designating a desired position the user determines to be white in the observation image on the display, and a control unit for detecting and controlling white balance on the basis of the position designated by the user in the observation image; Column 9, Lines 40-56. Shinsky et al teaches that this method is advantageous because it allows a user to properly designate white areas in the image to ensure correct white balance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the white balance system of Shinsky with the image capture system of Ravkin so that the user can properly designate white areas in the image to ensure correct white balance.

Art Unit: 2612

***Allowable Subject Matter***

9: Claims 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

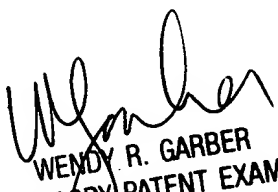
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James M. Hannett  
Examiner  
Art Unit 2612

JMH  
July 2, 2004

  
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